



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,203	02/14/2002	Glen Kaszubski	MAC-003	7110
38157	7590	04/20/2006	EXAMINER	
THE GLIDDEN COMPANY 15885 WEST SPRAGUE ROAD STRONGVILLE, OH 44136			YOON, TAE H	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 04/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/075,203

Applicant(s)

KASZUBSKI ET AL.

Examiner

Tae H. Yoon

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 58-102 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 91 is/are allowed.
- 6) ☒ Claim(s) 58-85, 87-90 and 92-102 is/are rejected.
- 7) ☒ Claim(s) 86 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

Art Unit: 1714

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 58-79 and 92-102 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

This is New Matter rejection since the recited "polymers of alkyl monomers of styrene" has no support in the originally filed specification.

The recited "substituted (silane or multi-silanol)" in claims 58 and 96 in not enabled until particular substituents recited in the specification is recited in the claims. If no substituents are disclosed, and then cancellation of said substituted is needed. Also, the recited "alkoxysilane" of claim 58 would encompass said substituted silane, for example.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 58-90, 92-95 and 98 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1714

Improper Markush language is recited in claims 58, 70, 77, 80, 83, 92 and 98, and a proper format is "selected from the group consisting of A, B, C --- and Z".

The recited "polymers of alkyl monomers of styrene" is unclear and indefinite. What is the alkyl monomer of styrene?

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 80-85 and 87-90 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Staiger et al (US 5,304,621).

Rejection is maintained for reason of record with following response.

Contrary to applicant's assertion, the recited language (--- selected from A and B) of claim 80 does not require a combination of fillers.

Claims 80-85 and 87-90 are rejected under 35 U.S.C. 103(a) as obvious over Product Brochure "MS polymer Silyl" of Kaneka Corp. in view of Smith, Jr. et al (US 4,308,372), Staiger et al (US 5,304,621) and/or Imai et al (US 4,760,123), and further in view of Hirosei et al (US 4,593,068).

Said Product Brochure teaches the instant formulation #105 (composition) in table of page 5, and it inherently possesses the instant viscosity and Tg. Said MS polymer Silyl meeting the instant (co)polymer having reactive silicon end groups is taught at page 2 wherein the viscosity is also seen (1 Pa • s equals 1,000 centipoise). Said MS polymer has Tg of about - 60 ° C (page 4) and thus said formulation in table of page 5 would have the instant viscosity.

The instant invention further recites employing clear filler such as fumed amorphous silica over Product Brochure. However, said Product Brochure teaches employing various fillers at the bottom of page 1, and the use of said fumed amorphous silica in moisture curable composition having (co)polymer having reactive silicon end groups is well known as taught by Smith, Jr. et al (col. 9, lines 35-57), Staiger et al (col. 7, lines 63-64 and example 13) and Imai et al (col. 8, line 11 and examples 1, 3 and 4, and the fumed silica is amorphous. For example, Staiger et al teach fumed silica, HDK H 15 at col. 18, line 7, which is also taught instant page 6, line 22. Hirosei et al teach the use of silica with polymers with carbon base backbone at col. 8, lines 61-66.

It would have been obvious to one skilled in the art at the time of invention to utilize fumed silica of Smith, Jr. et al, Staiger et al and/or Imai et al in a composition of Product Brochure as a filler since said Product Brochure teaches employing various

Art Unit: 1714

fillers and since the use of said fumed amorphous silica in moisture curable composition having (co)polymer having reactive silicon end groups is well known and since the use of clear filler is an obvious design choice and since the use of silica with any polymer such as a polymer with carbon base backbone is also well known as evidenced by Hirose et al absent showing otherwise.

Contrary to applicant's assertion, polymers of the cited art do not have to be the same and the secondary references are cited to show the art well known fumed amorphous silica. The evidence is Hirose et al who teach the use of silica with polymers with carbon based backbone.

Claims 58-72, 74-85, 87-90, 96, 97 and 99-102 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katz (US 5,298,572) in view of Staiger et al (US 5,304,621) or Baba et al (US 6,013,749), and further in view of Hirosei et al (US 4,593,068).

Katz teaches moisture curable composition at col. 8, table wherein the instant ingredients are seen. The polymers of Katz have the reactive silicon end groups (abstract). The formulation I in said table would meet the recited viscosity and glass transition temperature since it has excellent elongation property (col. 2, line 19). Katz also teaches employing fillers such as fumed silica at col. 6, line 26.

The instant invention further recites surface area of said fumed silica over Katz. However, the use of fumed silica having the recited surface area in curable compositions is well known as taught by Staiger et al, col. 7, lines 63-64, wherein more

Art Unit: 1714

than 50 m<sup>2</sup>/g is taught. The instant "less than 50 m<sup>2</sup>/g" (encompassing 49.9999) would be an obvious modification of said more than 50 m<sup>2</sup>/g (encompassing 50.0001) since it is almost same. Baba et al teach fumed silica having the recited surface area at col. 8, line 39 to col. 9, line 10 wherein Aerosil OX50 used in the instant example is taught.

It would have been obvious to one skilled in the art at the time of invention to utilize fumed silica having the recited surface area of Staiger et al or Baba et al in Katz since Katz teaches employing fumed silica absent any criticality of the surface area and since the use of silica with any polymer such as a polymer with carbon base backbone is also well known as evidenced by Hirose et al.

Claims 58-85, 87-90 and 96-102 are rejected under 35 U.S.C. 103(a) as being unpatentable over Katz (US 5,298,572) in view of Staiger et al (US 5,304,621) or Baba et al (US 6,013,749) and further in view of Hirosei et al (US 4,593,068), and further in view of Furukawa et al (US 5,459,205) or Yamaguchi et al (US 6,686,047).

Claims 73 and 98 further recites particular dehydrating agents, but such dehydrating agents are well known as taught by Furukawa et al (col. 9, lines 39-49) and Yamaguchi et al (col. 9, lines 34-35). The recited index of refraction in claim 96 is an inherent property of fumed silica of Staiger et al, Baba et al and Azechi et al. The evidence is Aerosil OX50, for example, taught by Baba et al and the instant specification.

It would have been obvious to one skilled in the art at the time of invention to utilize said dehydrating agents taught by Furukawa et al or Yamaguchi et al in Katz and

Art Unit: 1714

Staiger et al or Baba et al and Hirose et al thereof since Katz teaches the use of a dehydrating agent.

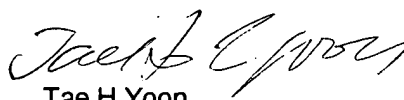
Claim 86 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 91 is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Tae H Yoon  
Primary Examiner  
Art Unit 1714

THY/April 17, 2006